



Leukemia

- Findings
 - Positive association (although not usually statistically significant) found in all 6 of the professional groups, the NCI studies and two small industrial cohorts
 - NCI 1994 update: 1.60 (95% CI = 0.90 to 2.82); 29
 - P trend = 0.02 (exposed and unexposed).
 - No association found among British Chemical workers and 2 small industrial cohorts
 - Meta-analyses (Zhang *et al.* 2009) 1.54 (1.24 to 1.91) 15 studies



Leukemia Subtype

- Not many studies evaluated subtypes
- Studies that did evaluated subtypes
 - NCI and NIOSH no association for leucocytic leukemia or or other unspecified leukemia
 - Higher risk estimates found for myeloid leukemia than all leukemia strongest
 - NCI
 - NIOSH
 - Professional studies
 - Zhang meta-analyses
- Embalmer study
 - No association with LHC of lymphoid original (81 cases)
 - Association with nonlymphoid origin appears to be explained by myeloid leukemia (33 of 44 cases)



LHC (Combined) and Subtypes

	Support for a positive association		Comments
All LHC	NCI cohort All 6 professional cohorts Meta-analyses	Peak exposure 1.25 (1.12 to 1.39)	Only a weak association in nested case-control study among embalmers No association in NIOSH, but exposure/response not evaluated
Hodgkin's	NCI (25 exp cases)	Peak & avg. exp (25 cases)	Small number of exposed cases in other cohorts Conflicting findings in other professional and industrial cohort studies reporting estimates, no association nested case-control study of embalmers (8 cases) Meta-analysis 1.23 (0.67 to 2.29)
Multiple Myeloma	NCI Cohort Meta analysis	Peak exposure 1.31 (1.02 to 1.67)	Small NS in British study and in 2 nested case-control studies . Not reported most studies Increase also found in unexposed in NCI study